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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,494	04/05/2001	Roger S. Brown	5181-86600	6832

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EXAMINER

CASIANO, ANGEL L

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/828,494

Applicant(s)

BROWN ET AL.

Examiner

Angel L. Casiano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,9-13,18-31 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,9-13,18-31 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Fritz Fleming
FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Response to Amendment

1. The present Office action is in response to Amendment dated 01 March 2004.
2. Claims 1, 4-6, 9-13, 18-31, and 34 are pending.

Priority

3. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 120 to PCT application PCT/GB99/03334.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 01 March 2004 was filed after the mailing date of the application on 05 April 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. Previous Objections to the Drawings have been overcome with the corrections filed in the present Amendment.

Specification

6. The disclosure is objected to because of the following informalities:

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The application as originally filed contained 34 claims, 30 pages of Specification, and 20 Figures (on 14 sheets), according to Application transmittal. Two Specifications were submitted on 20 August 2001, which appear to be related to the foreign applications cited in the claim for Priority. In addition, the application contains six US patents as well as non-patent reference material not listed in form PTO-1449.

7. Previous Objection to the title has been overcome.

Claim Rejections - 35 USC § 112

8. Previous Rejections under 35 U.S.C. 112, second paragraph, have been overcome.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 4-5, 9-13, 20-31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sudhakaran et al. [US 2003/0014468 A1] in view of Cepulis [US 6,397,268 B1].

Regarding claim 1, Sudhakaran et al. teaches a method of automatic (see [0008], [0014]) configuration (see [0002]) of a unit forming a component of an apparatus (see [0003]). The cited

reference teaches accessing information held in the unit that represents an object class for the unit (see [0034], [0061], [0062], [0063]). In another aspect of the claim, the cited art teaches using the accessed information regarding the class to reference object definitions for the class of unit (see [0033]). These object definitions include initialization data operable to produce initialization configuration information for the unit. Sudhakaran also teaches storing the configuration information in a configuration file for the apparatus (see [0029]). Nonetheless, Sudhakaran et al. does not explicitly teach “object definitions which include initialization code operable on receipt of the accessed class information to produce configuration information operable to produce object configuration statements for the unit, that comprise at least one of the following: the object class for the unit; an object instance number; an attribute name; and a value for the attribute” as pointed by the applicants. Furthermore, the cited art does not teach verifying “the validity of the configuration information and, when the configuration information is valid, store the configuration information in a configuration file for the apparatus including a location of the unit in the apparatus to enable functional integration of the unit in the apparatus”. Regarding these limitations, Cepulis teaches an *automatic configuration* method for field replaceable units (FRU) (see PCI cards, col. 1, lines 9-10; col. 2, line 39; col. 8, lines 65-67). Information is accessed on *insertion* of the unit into an apparatus (see col. 2, line 51). Each unit has class information (see col. 4, line 25). In addition, Cepulis teaches *initialization* code and *configuration* information for the unit (PCI device, col. 5, lines 20-30). Furthermore, the reference teaches storing information, including a *location* of the unit in the apparatus to enable functional integration of the unit in the apparatus (see col. 3, lines 57-60; col. 5, lines 54-56). This configuration information is stored (see col. 4, lines 31-33; col. 5, lines 54-56). At the time

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of the invention one of ordinary skill in the art would have been motivated to combine the cited references in order to obtain “a more robust and complete plug and play implementation of the computer system” (see Cepulis col. 6, lines 49-51). In addition, the combination of references would have provided *automatic software updates* in a system having PCI devices (FRUs) (see col. 3, lines 22-25).

As per claim 4, Sudhakaran et al. teaches accessing the unit for further configuration data (see [0029], [0033]).

As for claim 5, Sudhakaran et al. exposes configuration data including object class and device object (see “Abstract”; [0032], [0033]).

As for claim 9, Sudhakaran et al. teaches configuration information including class information identifying system class for the unit (see [0032]).

As per claim 10, Sudhakaran et al. teaches the apparatus for receiving a unit as probed for accessing class information in a unit at the location (see “Abstract”; [0033], [0034]). In addition, Cepulis teaches a *plurality of locations* for receiving the unit (see col. 4, lines 11-16).

As per claim 11, object configuration statements are stored in the configuration file, according to Sudhakaran et al. (see [0029], [0033]).

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As per claim 12, the prior art discloses a unit as a field replaceable unit (see Sudhakaran et al. [0003], [0014], [0016], [0027], [0091] and Cepulis (Abstract, "PCI card").

Regarding claim 13, the combination of references teaches a method of automatic (see Sudhakaran et al. [0008], [0014]) configuration (see [0002]) of a unit forming a component of an apparatus (see [0003]). Accordingly, the cited combination also teaches the apparatus directed to the implementation of this method. Therefore, the present claim is rejected under the same basis.

As per claims 20-25, these are oriented to the apparatus for the implementation of the method disclosed in previous claims. Accordingly, these claims are rejected under the same basis.

As for claim 26, the combination of references teaches an apparatus forming a computer system (see [0035]; Figs. 1-5).

As for claim 27, the combination of references teaches a fault-tolerant computer system (see [0002]).

Regarding claim 28, the combination of references teaches a configuration management system (see "Abstract", Figs. 1-5). In addition, the cited combination of prior art teaches the method and apparatus corresponding to the system claimed. Therefore, it also teaches the configuration management system operable on an apparatus that includes a plurality of units. Claim 28 is rejected under the same basis.

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As per claims 29 and 30, these are directed to the configuration management system oriented to the method and apparatus disclosed and rejected previously. Accordingly, the present claims are rejected under the same basis.

Regarding claim 31, the combination of references teaches a program embodying configuration management operable on an apparatus that includes multiple units (see previous rejections). Furthermore, the combination of disclosures teaches the method including the steps of producing initial configuration information for the unit and storing the configuration data. Claim 31, as directed to the "carrier medium carrying program means", is rejected under the same basis.

As for claim 34, the cited combination of prior art teaches information relating to an operating history (see "tracks", [0060]).

11. Claims 6 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sudhakaran et al. [US 2003/0014468 A1] in view of Cepulis [US 6,397,268 B1], in further view of Macon, Jr. et al. [US 5,752,249].

Considering claim 6, the combination of references teaches configuration information stored in memory (see [0010]). However, this memory containing configuration and class information is not disclosed as being *non-volatile*. It is well known by those skilled in the art that non-volatile memory refers to storage, whose contents are maintained when its power is off. Examples of these memories are ROMs, PROMs, flash memories, and EPROMs. Accordingly, Macon, Jr. et

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al. teaches the use of non-volatile memory for holding class information (see col. 6, lines 54-67). One of ordinary skill in the art would have been motivated to specify the cited memory in the combination of disclosures as non-volatile, in order to allow its content to be kept without power. Furthermore, one of ordinary skill in the art would have been motivated to modify the combination of references in order to obtain a memory for holding configuration information regardless of the state of the power.

In consideration of claims 18 and 19, these are oriented to the unit storage for the apparatus disclosed in previous claims. The combination of references teaches a method of automatic (see [0008], [0014]) configuration (see [0002]) of a unit forming a component of an apparatus (see [0003]). Accordingly, the combination of references also teaches the apparatus directed to the implementation of this method. The present claims are therefore rejected under the same rationale.

Response to Arguments

12. Applicant's arguments with respect to claims 1, 4-6, 9-13, 18-31, and 34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel L. Casiano whose telephone number is 703-305-8301. The examiner can normally be reached on 9:30-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703-308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

alc

01 June 2004

Fritz M. Fleming
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